

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Manitoba Aboriginal and Northern Affairs  
**PROPOSAL NAME:** Berens River Water Treatment Plant  
**CLASS OF DEVELOPMENT:** One  
**TYPE OF DEVELOPMENT:** Waste Disposal - Water Treatment Plants  
(Wastewater)  
**CLIENT FILE NO.:** 5641.00

### **OVERVIEW:**

The Proposal was received on March 7, 2013. It was dated February 27, 2013. The advertisement of the proposal was as follows:

“A proposal has been received from Arnason Industries Ltd. on behalf of Manitoba Aboriginal and Northern Affairs for the upgrading of the Berens River water treatment plant. The upgraded plant would be located at the site of the existing water treatment plant, and would utilize a package dissolved air flotation treatment process followed by ultraviolet disinfection and chlorination. The plant would treat approximately 28,000 litres of water daily with six hours of operation per day. Raw water for the system would continue to be pumped from the Berens River, and wastewater from the water treatment process would continue to be returned to the Berens River. Construction of the upgraded plant is proposed for the spring/summer of 2013.”

The Proposal was advertised in the Winnipeg Free Press on Saturday, April 20, 2013. It was placed in the online public registry, the Legislative Library, Eco-Network, and Millennium Public Library (Winnipeg) public registries. The Proposal was distributed to TAC members on April 12, 2013. The closing date for comments from members of the public and TAC members was May 20, 2013.

### **COMMENTS FROM THE PUBLIC:**

No public comments were received.

### **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

#### **Manitoba Conservation and Water Stewardship – Environmental Compliance and Enforcement Branch**

No comments/concerns.

**Manitoba Conservation and Water Stewardship – Parks and Natural Areas Branch**

No comments to offer as this does not impact any parks or ecological reserves.

**Manitoba Conservation and Water Stewardship – Water Science and Management Branch, Water Quality Management Section**

There is limited information provided with the proposal. It is noted the new water treatment plant will not result in increased flow. It is not stated how the new water treatment plant will differ from the existing plant with respect to chemicals used, and or any differing characteristics of reject water quantity or quality.

The Corix DAF information package shows that skimmer waste water solids concentration would be in the range of 15 to 20 mg/l however the filter backwash concentration of total solids would range from 150 to 200 mg/L. This discharge would occur in approximate 10 minute intervals periodically during operation.

The report notes that coagulants including Alum or Clear PAC 180 will be used. Sodium hydroxide would be used for pH adjustment and sodium hypochlorite would be used as a disinfectant.

With respect to water quality, the principle concern is to ensure that the water quality of Berens River and Lake Winnipeg is not adversely impacted by the development. The proponent would have to ensure that any discharges from the plant would be in compliance with the Manitoba Water Quality Standards, Objectives and Guidelines. Parameters of potential concern include but are not limited to chlorine residual, total suspended solids, and pH.

A general clause that could be included in a potential license is as follows:

- The Licencee shall not release any effluent from a final discharge point if: the effluent quality is resulting in, or is likely to directly or cumulatively result in, a downstream degradation of the water quality immediately beyond a maximum 10% mixing zone (by volume) within the Berens River, relative to the Manitoba Water Quality Standards, Objectives, and Guidelines and/or nutrient control strategies and regulations developed by Manitoba Conservation and Water Stewardship.

Disposition:

Water quality protection can be addressed through licence conditions requiring monitoring for parameters likely to be of interest in the operation of the plant, and a condition requiring an alteration in operation if monitoring results are not satisfactory.

### **Manitoba Conservation and Water Stewardship – Fisheries Branch**

Fisheries Branch has reviewed this proposal submitted from Arnason Industries Ltd. on behalf of Manitoba Aboriginal and Northern Affairs for the upgrading of the Berens River water treatment plant. The upgraded plant would be located at the site of the existing water treatment plant, and would utilize a package dissolved air flotation treatment process followed by ultraviolet disinfection and chlorination. The plant would treat approximately 28,000 litres of water daily with six hours of operation per day. Raw water for the system would continue to be pumped from the Berens River, and wastewater from the water treatment process would continue to be returned to the Berens River. There will be no increase in water production rates so the existing Water Rights Licence is applicable. The applicant indicates that the community will provide standard monitoring of wastewater to confirm prediction of “no effect”.

Overall there was very little information in the proposal to assist in reviewing this application. Most useful would have been background TSS levels in Berens River compared to the waste water as well as other relevant parameters including river flows and the ratio of wastewater to river.

Berens River provides year round habitat for a number of small and large bodied fish species as well as habitat for the completion of some life stages of fish species that reside in Lake Winnipeg. As long as the wastewater meets Manitoba Water Quality Standard Objectives and Guidelines for Aquatic Life and there is a monitoring requirement, fisheries concerns should be addressed. We defer to the recommendation of our colleagues in Water Science Management in this area.

Disposition:

These comments can be addressed through licence conditions.

### **Manitoba Conservation and Water Stewardship – Office of Drinking Water**

I reviewed the above noted EAP for a new water plant at Berens River. Based upon the EAP, Office of Drinking Water has no concern with the EAP respecting drinking water safety. However, it should be emphasized to the Proponent that a Permit to Construct or Alter a Public Water System **must** be obtained from ODW **before** construction of the new water treatment plant begins. Permit application forms and explanatory materials are available on ODW’s website. If the Proponent has any questions, he can call Approvals Unit at 945-5936.

Disposition:

This information was forwarded to the proponent’s consultant for information.

**Manitoba Conservation and Water Stewardship – Water Use Licensing**

If the annual raw water demand exceeds what is permitted on the existing water rights licence as a result of the change in treatment technology, then ANA will need to apply to the Water Use Licensing Section of MCWS to increase the annual allocation for the plant.

**Disposition:**

This information was forwarded to the proponent's consultant for information.

**Manitoba Infrastructure and Transportation - Highway Planning and Design Branch, Environmental Services Section**

No concerns.

**ADDITIONAL INFORMATION:**

No additional information was required to address comments on the proposal.

**PUBLIC HEARING:**

As no public comments were received and no requests for a hearing were filed, a public hearing is not recommended.

**CROWN-ABORIGINAL CONSULTATION:**

The Government of Manitoba recognizes it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of a treaty or Aboriginal right of that First Nation, Métis community or other Aboriginal community.

The proposal involves a change in the water treatment process, with no change in the water use, water withdrawal location, water treatment location, or wastewater discharge location. The water treatment plant is relatively small, and process wastewater from the plant is not anticipated to have a significant effect on the receiving watercourse. Since resource use is not affected by the project, it is concluded that Crown-Aboriginal consultation is not required for the project.

**RECOMMENDATION:**

It is recommended that the Development be licensed under *The Environment Act* subject to the limits, terms and conditions as described on the attached draft Environment Act Licence. It is further recommended that enforcement of the Licence be assigned to the Eastern Regional office of the Environmental Compliance and Enforcement Branch.

PREPARED BY:

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Environmental Approvals Branch – Energy, Land and Air Section  
for Mines and Wastewater Section

May 22, 2013

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